Abstract ID : 108

Title : Tagging and tracking of bowhead whales (Balaena mysticetus) in West Greenland

Category : Habitat / Distribution

Student : Not Applicable

Preferred Format : Oral Presentation

Abstract : Bowhead whales (Balaena mysticetus) were tagged with satellite transimitters and retreivable time depth recorders (TDRs) using several techniques in Disko Bay, West Greenland, between 2000 and 2003. Satellite transmitters provided data both on local area-use in coastal West Greenland and information on timing and patterns of long distance dispersal. Information on spring and summer migration patterns across Baffin Bay, focal areas utilized for feeding or social interactions, wintering ground locations, habitat use including sea ice selection, and stock delineation has been collected with satellite tags and would not be possible to obtain by other means given the remote habitat and offshore location of this species. Instrumentations with TDRs have provided detailed data on the diving behavior of bowhead whales in spring, where considerable feeding activity is presumed to occur. Dives to depths of at least 400 m occur ccasionally, however, most diving activity is focused between 30-50 m depths just below the peak of the phytoplankton bloom. The main prey is assumed to be copepods which ascend to 30-50 m in this area in spring, however, amphipods may also occasionally be taken in coastal areas on the bottom. The bowhead whale shows much larger variability in movement patterns and migration routes in Baffin Bay and adjacent waters when compared to the two other high Arctic cetaceans, the narwhal (Monodon monoceros) and the beluga (Delphinapterus leucas). With recent information on increasing sea ice in Baffin Bay, telemetry data will provide critically important information for conservation of the high Arctic cetaceans.